DOCUMENT RESUME

ED 154 979 95 RC 010 560

AUTHOR Rogers, Everett M.
TITLE A Comparison of Agricultural Extension in Five States.
INSTITUTION Far West Lab. for Educational Research and Development, San Francisco, Calif.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Jan 78
CONTRACT 400-76-0050
NOTE 93p.; Page 18-19 may not reproduce well due to small print size of original document

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Agricultural Personnel; Community Development; *Comparative Analysis; Educational Innovation; Extension Agents; *Extension Education; Financial Support; Interagency Cooperation; *Organization; Organizational Communication; Program Coordination; Program Descriptions; Program Development; Questionnaires; Resource Allocations; *Rural Extension; *State Programs; Urban Areas
IDENTIFIERS California; Colorado; New Mexico; New York; Wisconsin

ABSTRACT

The nature of the Cooperative Extension Service in agriculture was examined to identify aspects that could be applied to the design of an educational extension service. To learn about the organization, programs, and priorities of Cooperative Extension, employees of the state extension services in California, Colorado, New Mexico, New York, and Wisconsin were interviewed. These states were selected on the basis of geographical distribution and variability on such criteria as population distribution (rural or urban), natural resources, and extension service organizational arrangement. In all but Wisconsin, 6 to 12 people were interviewed, including the state director, a state extension specialist, and county agent in both rural and urban counties. Also interviewed in some states were state-level staff development officials, regional specialists, faculty members at the state college, and paraprofessionals. In Wisconsin, the Chancellor/Vice Provost and the Assistant Chancellor/Director of Cooperative Extension were interviewed. Among the findings were that: in general, the extension service was decentralized and loosely coupled; there was a low degree of Federal control over state- and county-level units; production agriculture was still the central concern of Cooperative Extension; in most states, counties and groups of counties could initiate programs in any area which are especially responsive to local needs and provide an immediate, concrete service, i.e., Community Resource Development, Pesticide Certification, and Expanded Food and Nutrition Program. (NQ)

ED154979

RC

A COMPARISON OF AGRICULTURAL EXTENSION IN FIVE STATES

by

Everett M. Rogers

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

January, 1978

RC010560

FAR WEST LABORATORY
FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

JUL 1978
ERIC/CRESS
RECEIVED

This project has been supported with Federal funds from the National Institute of Education, Department of Health, Education, and Welfare, under Contract # 400-76-0050. The contents do not necessarily reflect the views or policies of the Department of Health, Education, and Welfare and the National Institute of Education, and no official endorsement should be inferred.

TABLE OF CONTENTS

PREFACE..... i

SUMMARY AND RECOMMENDATIONS

by Everett M. Rogers and Kay Magill..... 1

CALIFORNIA COOPERATIVE EXTENSION SERVICE

by Kay Magill..... 8

COLORADO COOPERATIVE EXTENSION SERVICE

by Rekha Agarwala-Rogers and Andrew P. Hardy..... 13

NEW MEXICO EXTENSION SERVICE

by Everett M. Rogers and Rekha Agarwala-Rogers..... 30

NEW YORK COOPERATIVE EXTENSION SERVICE

by Kay Magill..... 49

WISCONSIN COOPERATIVE EXTENSION SERVICE

by C. L. Hutchins..... 66

APPENDIX A - E

Respondents Interviewed - Alphabetically by State

PREFACE

This activity has been carried out under the auspices of Larry Hutchins, Chief, School Practice and Service Division, Dissemination and Resources Group, National Institute of Education. The work is intended to provide a current overview of the Agricultural Extension Service (in five states) in an effort to abstract elements which may be applied to dissemination and utilization in education as well as providing a vehicle for initiating an educational extension service.

The Far West Laboratory research staff involved in this report were Paul Hood, who directed the activities, and Betty Pool, who coordinated and edited. In addition, all the authors presented herein are associated with the Institute for Communication Research, Stanford University.

It should also be noted that without the cooperation of State Agricultural Service personnel, this work would not have been possible.

A COMPARISON OF AGRICULTURAL EXTENSION IN FIVE STATES

SUMMARY AND RECOMMENDATIONS

Everett M. Rogers
Kay Magill

The purpose of this research was to determine the current nature of the Cooperative Extension Service in agriculture in order to identify aspects that could be applied to the design of an educational extension service. To learn about the organization, programs, and priorities of Cooperative Extension, we interviewed employees of the state extension services in California, Colorado, New Mexico, New York, and Wisconsin. These states were selected on the basis of geographical distribution and variability on several criteria, as follows:

1. California -- populous, rich agricultural state, many natural resources, organized under state extension officials (rather than by campus);
2. Colorado -- distinctly different urban and rural areas (few suburbs), fairly typical organizational arrangements, innovative programs;
3. New Mexico -- relatively poor, rural state, few natural resources, only one major metropolitan center, three distinct cultures (Anglo, Hispanic, Indian);
4. New York -- populous, urban, unusually high proportion of support derived from county, county professionals employed by county (rather than by state); and
5. Wisconsin -- unified extension services in a very broad range of fields outside agriculture, very high level of county support.

In all but one state (Wisconsin), we interviewed from six to twelve people, including: the state director, a state extension specialist, and county agents in both rural and urban counties. In some states, we also interviewed state-level staff development officials, regional specialists, faculty members at the state college, and paraprofessionals. In Wisconsin, two people were interviewed: the Chancellor/Vice Provost and the Assistant Chancellor/Director of Cooperative Extension.

Similarities and Differences Across the States

In general, the extension service is decentralized and loosely coupled. There is a low degree of Federal control over state- and county-level units. In the case of high-priority Federal programs such as energy conservation, financial or political pressures to accept the programs are often brought to bear on the state and county, but there is rarely any overt coercion. Control of the state organization over county operations varies greatly from state to state. Many programs are initiated at the county level in response to client needs. These local needs may be attended to by county staff or referred to regional or state specialists. In some cases, multi-county or regional programs are often undertaken.

Production agriculture is still the central concern of Cooperative Extension. However, over the years there has been a widening of the scope of extension programs, to the point that some states (such as Wisconsin) have developed "university extension services" concerned with a broad range of educational programs in addition to agricultural ones. How far the educational programs should reach is a matter of debate, and the different states demonstrate disparate philosophies regarding the proper role of Cooperative

Extension and the emphasis to be placed on production-related activities. The decline of the rural population in the U.S. and the greater attention to high-priority social issues and equity for both the urban and rural poor have contributed to the widening scope of extension services. However, the recent reorganization of the Federal Extension Service in the USDA more closely ties extension to agricultural research, thus pressuring Co-operative Extension to restrict its interests to production agriculture. In addition, state extension services are usually organized in colleges of agriculture in state universities, rather than in adult education or university extension. Some variations are: the New York Extension Service (organized within the College of Human Ecology) and the Wisconsin Cooperative Extension (considered a "college" in the state university system). Finally, although some extension employees have added graduate training in the applied social sciences, education, and business administration to their undergraduate degrees in agriculture and home economics, they tend to work mainly in the areas in which they are most comfortable and have the most credibility.

New Extension Programs

New programs and priorities can be developed from any point in the extension system. Federal mandates and allocation of funds are sometimes sufficient to establish a statewide program; while the state is not forced to adopt the Federal program, there are financial and political incentives to do so. Only very high-priority programs are initiated in this top-down fashion. States do not usually dictate programs to the counties; rather, they establish guidelines and set objectives that the counties may then follow. The degree to which counties are obliged to adhere to these suggestions varies from state

to state. New Mexico, for example, is a highly centralized, state-oriented organization, while New York's County Association system allows for considerable autonomy on the part of the counties. There is usually some financial or legal advantage to following the guidelines set by the state.

In most states, counties and groups of counties can initiate programs in any area. These programs are especially responsive to local needs and provide an immediate, concrete service.

Several recent extension service programs are described below:

1. Expanded Food and Nutrition Program (EFNEP)

EFNEP, launched in 1969, was a radical change for Cooperative Extension for the following reasons:

a. It had almost nothing to do with production agriculture and little to do with the emphases of extension home economists;
b. The target audience (lower-income rural and urban families) was very different from the earlier audience of prosperous farm families;
c. The goal of the program was equity rather than increased production;
d. Educational methods were intensive (home visits to clients) rather than extensive (mass media, group meetings); and
e. Paraprofessional aides from the community were used, putting the professional home economist in the role of supervisor.

EFNEP brought its own Federal funding and criteria for selection of aides and target clients.

2. Community Resource Development (CRD)

CRD offers an educational program for groups interested in improving their communities, including local and state government agencies, civic groups, school boards, service organizations, and young people's groups. CRD is usually a statewide program, operating in both rural and urban counties. A county agent is responsible for assisting communities in dealing with issues such as housing, local government, energy conservation, land use and environment, and community facilities. He or she acts as an organizer, an information resource, and/or a liaison for groups wishing to analyze community problems and develop programs.

3. Pesticide Certification

This is an example of a mandatory Federal program that has incurred some resentment on the county level. Through Congressional intervention in the activities of EPA and USDA, the Extension Service was made responsible for providing training programs leading to certification in the handling of certain pesticides. Since it was necessary for agricultural workers to use these chemicals, they had little choice but to accept both the Federal money and Federal regulations. This associated the Extension Service with the regulatory body in the minds of many clients, although extension personnel themselves were not responsible for enforcing the laws. Several people interviewed felt that this undermined their position as a non-advocacy informational agency. (A similar situation arose in a California county, with regard to the water quality program instituted by the state in response to Federal pressures. Agents had to try hard not to become involved in the creation or policing of regulations. They would not confront or report a farmer who appeared to be doing something illegal; instead, they would inform him/her of alternative activities.)

Recommendations

1. Future extension work should include university schools of education and other university resources. University affiliation provides invaluable resources and facilitates research utilization.
2. Variability in educational dissemination from state to state should be expected and encouraged.
3. Continued support from power groups in education is needed to provide continuity and stability in educational extension. A major factor in the strength and success of the Cooperative Extension Service in agriculture has been the support of groups like the American Farm Bureau Federation.
4. The personal qualities of educational extension agents (e.g., their backgrounds, empathy, personal attractiveness, etc.) will be important factors in their success.
5. A continuous program of inservice training for educational extension agents is important.
6. Bottom-up initiation of new extension programs from the local level should be encouraged, along with top-down initiation from the Federal level.
7. The cooperative approach to Federal, state, and local funding of educational extension will be an important feature in its success.
8. A regulatory function (in carrying out legislative mandates) is incompatible with an extension function. It undermines the ability of the extension service to provide non-judgmental information.
9. A management information system may perform a useful reporting, monitoring, and feedback function in an extension agency.

10. The use of paraprofessional aides has been an important factor in the success of programs involving much client contact and provision of information.
11. A computer-based information system (like ERIC) can provide a useful backup service for local-level extension agents (although such a system is only utilized on a pilot basis in agricultural extension today).

CALIFORNIA COOPERATIVE EXTENSION SERVICE

Kay Magill

Organization of the California Cooperative Extension Service

The state organization has its base on the University of California campus, and is part of the state agricultural college. Extension administration officials are located for the most part at the Berkeley campus. The organizational structure has recently become more flexible and ad hoc, since more authority has been delegated to Assistant Directors and regional offices. Previously, all matters were routed through Berkeley, which resulted in an administrative backlog.

Extension specialists are located at each of the three UC campuses having agricultural schools (Berkeley, Davis, and Riverside). The Berkeley office coordinates the specialists' work and defines problems and goals on a state-wide basis. The specialists work under the state officials rather than the heads of their respective campuses. This is unusual; most state organizations are campus-oriented.

The extension specialist plays an important linking role. He/she coordinates applied research across the state, interprets experiments, and brings new ideas to the county. He/she should therefore be a good communicator, and an innovator as well. Specialists have no administrative assignments (except for the programmatic specialists, who <u>are</u> administrators).

At the county level, there are extension offices staffed by professionals who are part of the university staff and by support people who are county employees. New knowledge usually comes to the county agents through the extension specialists; most new information is developed at the university in response to problems faced by local clients. There are no facilities for basic research at the county level, but much applied research takes place.

Organization of the County Office

The professional staff of the county extension office is headed by the County Director. The Director often divides his/her time between administrative and program responsibilities. Under the Director are advisors in the various agricultural areas, home economics, 4-H, public services, etc. These advisors are all professionals at the same level, and are all paid through state university funds, at university scale.

Under these officials are Staff Assistants, middle-level professionals in certain programs who are also university employees. In Santa Clara County's Expanded Food and Nutrition Program (EFNEP), for example, the Staff Assistants are the links between the County Advisor in Home Economics and the individual cases covered by the program.

In some county programs, there are paraprofessionals who deal directly with clients. For instance, in EFNEP nutritional assistants are hired by the county to meet client families, provide information, and raise interest and support in the community. In Santa Clara County, these paraprofessionals are supervised by the Staff Assistants, who then report to and meet with the Home Economist in charge of the program.

Activities of County Personnel

The role of the county agent is: to provide information, to assess the needs of the local clients, and, increasingly, to evaluate products and techniques for people who already have an awareness of them and an interest in using them. The agent requires research evidence before recommending anything to a client.

Agents in the county office provide information through both mass media (e.g., newletters, magazines, pamphlets, newspaper columns) and interpersonal

channels. Much door-to-door activity is undertaken (often by aides, such as the nutritional assistants) in order to find and inform clients. All employees in the county office live in the communities they serve, and are generally similar to most of their clientele with regard to background, education, ethnic identification, etc.

Comparison of County Extension Offices and Intermediate Educational Agencies

An educational agency currently active in providing an informational function similar to that of the county-level extension offices if the intermediate educational agency. In Santa Clara County, this agency is located in the Office of the Superintendent of Schools. This office is supported primarily through county funds.

Within it is the Instructional Services Division, which provides services such as dissemination of information about Title IV-C programs, maintenance of an informational resources center for teachers, provision of technical assistance, liaison between local, county, and state agencies, and provision of information concerning new ideas and techniques in education. Client contact takes place through personal contact and the mass media. A paraprofessional information assistance answers questions in response to clients' telephone requests.

Some of these services have existed for some time, while others are currently being implemented. No planned model of operations and delivery is being used at present. Officials in the Instructional Services Division hope to improve the training in communication and evaluation skills received by Division staff members.

The head of the Division is an Assistant Superintendent in the Office of the Superintendent of Schools, Santa Clara County, and reports directly to

the Superintendent. The Instructional Services Division has three branches: operational programs, support services (including general education, television station KTEH, and vocational education and guidance), and divisional services. Three other divisions exist in the Superintendent's Office: special education, business, and research and development.

The Division's dissemination activities are somewhat similar to those of an urban cooperative extension office. Its major goals are:

1. To help the community identify priority areas in which education plays a role;
2. To disseminate information concerning educational alternatives to the community;
3. To act as a channel for state actions;
4. To operate programs at the intermediate level; and
5. To support the office of the Superintendent.

Innovative Programs

For the most part, new programs in the cooperative extension service start due to external pressure; the service would probably change little, were it not for pushes from the outside. Federal mandate and allocation of funds are two of the most important reasons for changing old programs and adding new ones. Client needs are not usually the motivating force behind state-sponsored programs.

Some programs come about through the academic work of the extension service professionals. However, such programs or services are not especially sought after, since they are expensive and since not much data are available on their effectiveness.

In rural counties (Merced, for instance), much of the initiative for action comes from client requests. There is more of an interest in local needs on the county level than on the state level, with regard to initiating programs. Clients' needs may be created by environmental factors, or by statute. For example, the state of California, in response to Federal pressure, recently set up a water quality program to clean up public waters. The state required people to keep livestock waste on their own land and prohibited the contamination of streams with waste. The farmers in Merced went to the extension office for help in complying with this regulation, setting off a county-level search for new methods of dealing with the problem. Agents went around the country to visit successful operations and to get new ideas.

Agents do not become involved in the creation or policing of regulations--this is an important point. One of the most innovative operations visited with regard to the water quality program was engaged in actions that appeared to be illegal. The agents did not confront or report the farmer; instead they tried to get more information on what he could or could not do. (They discovered that this farmer had a special arrangement with the state.) It is very important that the county extension office have the trust and respect of the farmer clients.

COLORADO COOPERATIVE EXTENSION SERVICE

Rekha Agarwala-Rogers
Andrew P. Hardy

Organization of the Extension Service

The Extension Services Director reports directly to the President of Colorado State University at Fort Collins. Three assistant directors head the four service areas, acting as liaisons between academic departments and the extension service.

An interesting organizational change occurred in 1968. Four area directors were appointed to head new units that resulted from the combination of two or more counties into one area or unit. The Golden Plains Area Extension Office, for example, consists of Washington, Phillips, Yuma, and Kit Carson Counties.

The agricultural extension service is arranged in four main subject-matter-related service areas, as follows:

1. Agriculture, Marketing, and Natural Resources
   - Providing information, education, and demonstration regarding new crop varieties
   - Improving livestock nutrition, management, and marketing skills
   - Providing information on requirements imposed by Federal and state regulations (EPA, OSHA, etc.)
   - Improving record-keeping and computerized farm-management data
   - Predator, insect, and disease prevention or control
   - Improving agricultural practices
   - Promoting efficiency in irrigation practices, water and soil conservation

2. 4-H/Youth
   - Livestock production
   - Dog training and care
   - Photography
   - Automotive mechanics
   - Safety
   - Citizenship
   - Food and nutrition
   - Clothing
   - Leadership development
   - Demonstrations
   - Public speaking
   - Gardening
   - Energy conservation
   - Natural resources and environment
   - Intercultural exchange
3. Family Living (Home Economics)
   - Foods and nutrition
   - Textiles and clothing
   - Child development and family relationships
   - Health and safety
   - Consumer education
   - Family financial management
   - Housing and home furnishings
   - Energy conservation

4. Community Development

- Helping communities assess local needs and development priorities
- County Information Service (specific data by counties for use by planners, community leaders, and agencies involved in planning and development)
- Providing information to communities for development of facilities and services
- Solar energy workshops
- Self-help projects
- Youth programs in community development
- Rural health education
- Community-wide energy and water conservation programs
- County fairs

The first three areas have traditionally been most important to the Extension Service. (Note that home economics has been renamed "family living.") Community development was welcomed in urban situations by the extension staff.

The Assistant Director for Agricultural Production, Marketing, and Natural Resources felt that his program still constitutes 50 to 60 percent of the field workload, even though the state farm population was down to four percent in 1977, from twelve percent in 1962.

Personnel and Staffing

Table 1 indicates that we interviewed a representative sample of personnel at various levels (see following page).

The Extension Service is headed mainly by white males. The traditional area of home economics is staffed by white females. The training of the field

TABLE 1

Characteristics of the Respondents in the Extension Service in the State of Colorado.

Respondents	Area of Specialization	Age in Years	Sex	Highest Completed	Number of Years in the Service	Native State	Organizational Rank	Farm Background
Director Watts	Animal Husbandary Public Admin	60	Male	MA	21 years	Colorado	Administrator	Yes
Associate Director	Plant Pathology	61	Male	Doctorate	17 years	Wisconsin	Administrator	Yes
Assistant Director	Agro Economics	58	Male	Doctorate	- - -	Oklahoma	Administrator	No
Personnel Officer	Extension Education		Male	MA	10 years	Missouri	Administrator	Yes
Specialist	Agronomy	48	Male	MA	8 years	Olkahoma	Administrator	
County Agent (Rural)	Agronomy	58	Male	MA	21 years	Colorado	Field Work	Yes
Area Director	Agronomy	46	Male	MA	16 years	Colorado	Administrator in Field	Yes
Extension Agent Home Economics (Rural)	Vocational Education	38	Female	MA	17 years	Colorado	Field	No
Extension Agent Community Development (Urban)	Vocational Education Urban Regional Planning	34	Female	MA	8 years	Colorado	Field	Yes
Extension Agent Livestock (Rural)	Animal Science	23	Male	BA	Less than one year	New York	Field	Yes
Extension Aide Horticulture (Urban)	Horticulture	24	Female	BA	Less than one year	Colorado	Field	No
Extension Agent Youth (Urban)	Business Administration	28	Male	BA	One year	Colorado	Field	No

staff has broadened to include more social science content and process orientation.

A lack of trained blacks, Spanish-speaking persons, and other ethnic candidates has forced the service to hire the most qualified person rather than the most ethnically homophilous person. In the rural county of study, only once in six months was a Chicana hired to start a 4-H club for Spanish-speaking children. (The program stopped when she left.) We were told that the lack of ethnic and rural staff was due to:

1. Non-availability of trained and "well-qualified" personnel;
2. Lower pay scales, so well-qualified minorities go to other organizations;
3. Resistance to and "organization" of minority field workers in the counties; and
4. Small minority population in the state.

Financial Resources

The overall budget has not increased much in the past five years to keep up with the emerging need to provide specialized services. For example, the need for solar energy-related personnel and research is severely felt by the staff.

Figure 1 indicates that the 4-H and youth program constitutes 40 percent of the total budget ($808,086 includes personal services).

Sources of funds are Federal, state, and county (Figure 2). For the most part, funding is provided by the state. The state gets funds from several sources and Federal mandates. The state legislators are quite influential in determining the state priorities. Sources of funds largely determine the nature of the programs and program thrust.

Figure 1. Sources of Funds/Service Area Allocation of Funds Based on Expected Increases and Projected Needs for Fiscal Year 1978-79.

SOURCE OF FUNDS	Estimated 1977-78	Requested 1978-79	Increase 1978 - 79	Explanation of Change
Other Institutionally Collected Income - Schedule 210				
Federal Smith-Lever Act	$1,460,863	$1,515,863	$ 55,000	Estimated Increase - $55,000
County Funds for Agents' Salaries:				
Regular Formula	493,731	551,744	58,013	9% of Requested Field Salary Increases
New Positions		76,600	76,600	Increases for Additional Positions Requested.
Crop Sales - Northern Colorado Research Demonstration Center	18,000	18,000	-0-	
Total Other Institutionally Collected Income:	$1,972,594	$2,162,207	$ 189,613	
Income From General Fund - Schedule 220				
Regular Appropriation	$3,682,437	$4,971,358	$1,288,921	
Salary Anniversary and Adjustment Allocation	34,724	-0-	(34,724)	
Group Health Insurance Allocation	12,000	-0-	(12,000)	Increases requested for:
Total Income from General Fund	$3,729,161	$4,971,358	$1,242,197	Continuing Program $765,174
TOTAL INCOME	$5,701,755	$7,133,565	$1,431,810	Expanded Program 477,023
				$1,242,197

Increase - Continuing Program:		Total	Agricultural Production	4-H and Youth	Community Development	Family Living	Institutional Support	Capital Outlay	Admin and Plant Mainte.
Personal Services:									
Professional Staff -- Salaries & Benefits		$ 764,977	$ 255,994	$ 301,172	$ 67,764	$ 128,000	$ 12,047		
Support Staff--Salaries & Benefits									
Hourly Wages		2,660	905	1,064	239	452			
Total Personal Services		$ 767,637	$ 256,899	$ 302,236	$ 68,003	$ 128,452	$ 12,047		
		(269.0 FTE)	(88.5 FTE)	(104.0 FTE)	(23.4 FTE)	(44.3 FTE)	(8.8 FTE)		
Travel		$ 22,885	$ 7,186	$ 8,454	$ 1,902	$ 3,593	$ 1,750		
Operating Expense		32,361	10,663	12,544	2,823	5,331	1,000		
Capital Outlay		2,125						$ 2,125	
Pro Rata Share:									
General Administration		43,493							$ 43,493
Physical Plant		9,686							9,686
Total Increase -- Continuing Program		$ 878,187	$ 274,748	$ 323,234	$ 72,728	$ 137,376	$ 14,797	$ 2,125	$ 53,179
Increase Expanded Program:									
Extension Agents	19.0 FTE	$ 280,400	$ 61,250 (4.0 FTE)	$ 156,135 (10.9 FTE)		$ 63,015 (4.1 FTE)			
Campus Specialist	11.5 FTE	273,223	66,250 (3.0 FTE)	17,745 (1.0 FTE)	$138,303 (6.0 FTE)	33,125 (1.5 FTE)		$ 17,800	
Total Increase-- Expanded Program	30.5 FTE	$ 553,623	$ 127,500	$ 173,880	$138,303	$ 96,140		$ 17,800	
TOTAL INCREASE REQUESTED		$1,431,810	$ 402,248	$ 497,114	$211,031	$ 233,516	$ 14,797	$ 19,925	$ 53,179
Est. Expenditures, 1977-78		5,701,755	1,647,566	1,938,311	436,120	823,782	215,754	8,500	631,722
Requested Budget, 1978-79		$7,133,565	$2,049,814	$2,435,425	$647,151	$1,057,298	$230,551	$ 28,425	$684,901

Figure 2. Budget and Sources of Funds for the Field Operations (based on the estimated need for 1978-79).

BUDGET SUPPORT - FIELD OFFICES

	1975-76 Fiscal Year	1976-77 Fiscal Year	1977-78 Fiscal Year (Est)	1978-79 Fiscal Year Projected
State General Fund	$1,207,455	$1,404,200	$1,443,475	$2,090,391
Federal Funds	543,495	585,316	600,332	637,511
TOTAL STATE AND FEDERAL FUNDING	$1,750,950	$1,989,516	$2,043,807	$2,727,902
County:				
Budgets for Field Programs	$1,789,379	$2,103,481	$2,262,903	$2,510,661
Rental Value of County Offices	355,118	372,969	393,652	393,652
TOTAL COUNTY FUNDING	$2,144,497	$2,476,450	$2,656,555	$2,904,313
Overmatch by Counties	$ 393,542	$ 486,934	$ 612,748	$ 176,411

19

The director estimates that roughly 30 percent of the budget is provided by the counties. Funding for personnel and services comes from the state in such forms as university salaries, payment for state publications, channeled Federal funds, county support for office space, and local publications. All professional salaries are paid out of state university funds. Aides are paid out of county funds.

Innovation and Its Sources

The extension service personnel take pride in the fact that they are quite innovative in meeting the needs of their clients. Most innovation at the county level springs from local needs; however, many new programs in recent years are Federally and/or state mandated.

The use of paraprofessionals in the last five years is an innovative step for the extension service. The aides are used mainly in urban areas in the state of Colorado. For example, Jefferson County operates a very popular and well-publicized program called "Master Gardener" with the help of two aides. These aides/volunteers receive thirty-six hours of training on various topics, and meet once a month in Denver to discuss their work and work-related concerns. Aides have easy access to the horticulture staff and other agents via telephone. Volunteer aides are also used in the urban counties for extension work in home economics, 4-H and youth, and community development. There are approximately 400 aides in urban areas.

The rural situation is a bit different. The county we visited does not have any paraprofessionals or aides to help the professional staff. The Assistant Director for Agricultural Products, Marketing, and Natural Resources told of a program to train paraprofessionals (forty to fifty by 1980) to reach

small farmers, who comprise a sizeable percentage of the non-commerical farmers in the state of Colorado. These paraprofessionals will be required to have the ability to communicate with farmers who are much like themselves. They will not be required to have a minimum schooling level. Training of these paraprofessionals will be in the area of communication skills, problem-solving, and needs-determination. They will be paid by the county and/or state. There are 22,000 non-commercial farmers; the paraprofessional/client ratio will be 1:20.

The use of paraprofessionals has proven to be an effective way of reaching people. So far, paraprofessionals have not posed a threat to the professional staff. Some aides are given honorary titles like "Master Gardeners."

County Extension Advisory Councils

Local advisory committees are essential in determining the nature of new programs and securing involvement of community members. For example, the following programs were recommended by an extension service advisory committee in Colorado:

1. Quality of Living

The family continues to be the most humane and efficient system for the formulation of the values, skills, and self-discipline essential for effective functioning in a larger society. The Extension Home Economist helps people identify their needs and improve the quality of their life through educational programs and information encompassing all aspects of living, emphasizing Human Resource Management, Human Nutrition and Health, Housing, Clothing, and Human Development.

2. Youth Development

This traditional and on-going program is basic to the development of our youth. This program has great impact and needs continuous organizational and financial support to meet the needs of youth in these changing times. Past and current records substantiate these continuing program needs.

3. Community Resource Development

The County Extension Service has made a number of contributions in this are, serving and assisting the local leadership in developing programs and resources. This program area is important enough to justify ongoing program development.

Communication Strategies

Communication strategies are as follows:

1. Use of on-to-one, interpersonal channels as powerful mechanisms for information dissemination.
2. Use of radio for daily programs, especially in the rural counties.
3. Use of weekly or monthly newspaper columns to create awareness of services offered.
4. Use of television for announcements of meetings and programs, especially in the urban areas.
5. Use of videotapes and short films.
6. Use of meetings and groups to create awareness, as well as acceptance, of extension services.
7. Use of training courses and seminars to disseminate information for utilization in day-to-day matters.
8. Use of experts, specialists, and speakers.
9. Use of short, attractive, and illustrative materials.
10. Use of loose-leaf binders as handbooks on various topics where information is readily available.

11. Heavy reliance on telephone contacts. In one urban county, it is estimated that between April and September of each year the staff receives about eighty calls per day from consumers, and later in the year between twenty and thirty calls per day. Extension is able to reach about 25 percent of the total population of the state.

12. Aides of various types: Some are paid, some volunteer; educational levels vary depending on the nature of clients served, etc. A majority are from the local area and know the community and its problems.

13. Field staff equipped with two-way radios have proved to be very useful, since they are often on the move.

Evaluation

A one-page questionnaire is used in one of the counties (see Exhibit 1).

Urban and Rural Organization

Table 2 compares urban and rural counties.

Changing Patterns in the 1970s

1. The rural population in the state has declined to 4 percent in 1977 from 12 percent fifteen years ago; sophisticated and specialized knowledge is needed due to mechanization of farms. In one rural county, there were more divorces than marriages in the past year; in the same county, 50 percent of the women worked away from their homes at least part-time.
2. Paraprofessionals are used to meet the demand for services.
3. Training and education of personnel is more multi-disciplinary and social science-oriented.
4. All professionals must have at least a Master's degree.
5. Ethnic, racial, and sexual equality, required by law, is not well accommodated.

6. There are 25,000 farmers in the state. Average farm size is 1,800 acres. The operating represents an average of $850,000 in investments. The average unit requires about $400,000 in expenses annually. High investment makes the clients get the greatest return from their units. To obtain high returns, clients see the need for obtaining scientific knowledge.

EXHIBIT 1

WILLS AND TRUSTS AFTER THE TAX REFORM ACT OF 1976

Colorado State University Extension Service - Jefferson County

QUESTIONNAIRE

1. Please evaluate the instructor's presentation for information and delivery.

   STEVEN R. HUTCHINS

   MARK R. LEWIS

   ROBERT L. HILLER

2. What information did you find most useful?

3. How will you use this information?

4. On what topics, related to this subject, would you like more information?

Would you be interested in notification of different programs which are suggested for future workshops? _____YES _____NO If yes, please provide the following:

Name_____

Address _____

City _____ STATE _____ Zip Code _____

Optional Information:

If you desire to provide the following information, the instructors would find it useful for program evaluation.

Age_____ Under 20
_____ 20-30
_____ 31-40
_____ 41-50
_____ 51-60
_____ Over 60

Marital Status _____ Single
_____ Married
_____ Widowed
_____ Head of Household

Dependents _____Yes _____No If yes, number of dependents _____ Ages:

Comments:

ooperative Extension Service

Colorado State University
Fort Collins, Colorado
80523

Dear Coloradan:

Do you need help with taxes, home financial management, energy conservation, lawns and gardens, youth programs, homemaking, farming, ranching, or business? The CSU Cooperative Extension Service gives such help through Extension Agents located throughout the state. We also have specialists and faculty experts on the CSU campus in Fort Collins who keep up-to-date on the latest information in many fields.

We are eager to serve you in the best possible way. This questionnaire is meant to find out what your future needs are. You have been chosen at random as one of a few Coloradans to speak for the interests of citizens in your area. Your help is extremely important. Be assured that your answers will be anonymous.

Sincerely yours,

Lowell Watts

Lowell Watts
Director of Extension and Community Services

Issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Lowell H. Watts, Director of Extension Service, Colorado State University. By law and purpose, the CSU Cooperative Extension Service is dedicated to serve all people on an equal and nondiscriminatory basis.

• Drop in the mail — no stamp necessary.

1. How often might you want information, advice, or training on the follo. next year to three years? (For example, you might receive the informat. county Extension office, by talking to the County Agent, from radio, TV phlets, evening or daytime meetings, short courses, or workshops.)

Circle *one* n:

FINANCIAL AND OCCUPATIONAL	never	
Taxes, income and other	0	1
Personal financial management	0	1
Legal aid	0	1
Estate planning	0	1
Financing of businesses, farms	0	1
Construction of buildings, light construction	0	1
Management, small business	0	1
Marketing, organizations and operations	0	1
Organization and personnel management	0	1
Welfare, rehabilitation	0	1
Jobs, employment	0	1

PERSONAL ENRICHMENT	never	
Arts and crafts	0	1
Career & occupational information (counseling and job improvement)	0	1
Communication skills (speaking and writing, radio and television)	0	1
Leadership skills	0	1
Personal relations (family, friends, job, community)	0	1
Recreation activities and learning	0	1
Science (geology, astronomy, biology, etc.)	0	1

HOME AND FAMILY	never	
Child development and care	0	1
Family relationships	0	1
Clothing and fabrics (buying, care, use, construction)	0	1
Consumer assistance and information	0	1
Diet and nutrition	0	1
Food buying and preparation	0	1
Food preservation	0	1
Food safety	0	1
Gardening	0	1
Home furnishings (buying, use, care)	0	1
Home management (money, time, credit)	0	1
Household equipment (buying, use, care)	0	1
House plants	0	1
Housing (buying, renting, care, repair, improvement)	0	1
Human health	0	1

26

	never		some-times		often
ting, trends, investments, cooperatives,)	0	1	2	3	4
mental plants, lawns, flowers, etc.)	0	1	2	3	4
d health	0	1	2	3	4
ntification	0	1	2	3	4
(i.e. species)	0	1	2	3	4
health	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
ification	0	1	2	3	4
	0	1	2	3	4
, recreation)	0	1	2	3	4
(rodents, predators)	0	1	2	3	4
	0	1	2	3	4
nagement (advice, practices, data	0	1	2	3	4
, and production (corn, small grains, etc.)	0	1	2	3	4
es	0	1	2	3	4
	0	1	2	3	4
imals (beef, sheep, swine, horses, etc.)	0	1	2	3	4
imals (poultry, rabbits, etc.)	0	1	2	3	4
	0	1	2	3	4
	0	1	2	3	4
business	0	1	2	3	4

LOPMENT	never		some-times		often
mmunities and groups	0	1	2	3	4
assessment	0	1	2	3	4
lination and cooperation	0	1	2	3	4
ation	0	1	2	3	4
recycling	0	1	2	3	4
nd use planning	0	1	2	3	4
	0	1	2	3	4
ment	0	1	2	3	4
ment	0	1	2	3	4
services	0	1	2	3	4
blems, principles)	0	1	2	3	4
g communities	0	1	2	3	4

CES	never		some-times		often
	0	1	2	3	4
conservation, and management	0	1	2	3	4
onment	0	1	2	3	4
te	0	1	2	3	4

2. List here other information, training, or services you might need in the next year to three years which an agency like the CSU Cooperative Extension Service might provide.

_____

_____

_____

3. How often do you currently get information on any of the above subjects from the following sources?

Circle *one* number for each line:

	never		monthly		daily
Consulting with friends and neighbors	0	1	2	3	4
Consulting with experts	0	1	2	3	4
Television	0	1	2	3	4
Newspapers	0	1	2	3	4
Radio	0	1	2	3	4
Magazines	0	1	2	3	4
Newsletters	0	1	2	3	4
Books, bulletins, and pamphlets	0	1	2	3	4
Speakers, meetings, programs, workshops, short courses	0	1	2	3	4

27

4. The following methods are used by the CSU Cooperative Extension Service to inform the people of Colorado. How often have you received information from each of these Cooperative Extension sources?

Circle *one* number for each line:

	never		some-times		often
Articles written by Extension persons in magazines or newspapers	0	1	2	3	4
Pamphlets, books, bulletins, or project manuals (provided by Extension)	0	1	2	3	4
Consulting County Extension Agent via telephone	0	1	2	3	4
Consulting County Extension Agent personally	0	1	2	3	4
Newsletters (such as youth, 4-H, homemaking, potatoes, etc.)	0	1	2	3	4
Radio (Extension programs)	0	1	2	3	4
Speakers, programs, workshops, short courses (arranged by Extension)	0	1	2	3	4
Television (CSU Extension programs such as Herb Gundell's "Weekend Gardener")	0	1	2	3	4

5. If you have received information from the CSU Cooperative Extension Service, please rate the general quality of the information you received. Skip to the next question if you have not received such information.

Circle *one* number for each line:

FROM THE COOPERATIVE EXTENSION SERVICE	never		some-times		al-ways

educational experiences and activities are traditionally provided for 4-H and
CSU Extension Service. How important are each of these activities for the
mmunity?

Circle *one* number for each line:

	not important		somewhat important		very important
ces (4-H camps, fairs, shows)	0	1	2	3	4
ojects such as clothing, horses, arts,	0	1	2	3	4
training (counseling and guidance)	0	1	2	3	4
lopment	0	1	2	3	4
nces (youth exchange programs, etc.)	0	1	2	3	4
lopment (4-H and other youth)	0	1	2	3	4
effective use of leisure time	0	1	2	3	4
skills, writing, speech, arts, contests, s	0	1	2	3	4
ducation	0	1	2	3	4
tion through projects, activities, records	0	1	2	3	4

ate the following information about you:

the limits of a city or town? yes _____ no _____

creage on which you live more than 5 acres? yes _____ no _____

ace in which you live? yes _____ no _____

you live? _____

pation: (check all applicable) armed services _____ business or
farmer or rancher _____ homemaker _____ professional _____
les or services _____ skilled worker _____ student _____

ghest number of years completed): 0-8 9 10 11 12 13 14 15 16

female _____

e group) 18-25 26-35 36-45 46-55 56-65 more than 65

gle _____ married _____

nswer optional) American Indian _____ Black _____ Oriental _____
merican, Mexican-American, or Chicano) _____ White _____

roximate 1976 adjusted gross family income: (answer optional)
_____ $7,500-$14,399 _____ $14,400-$24,999 _____
_____ $50,000 or over _____

ve you lived in Colorado? less than 2 years _____ 2 to 5 years _____

younger than 18 in your home: none ___ 1 ___ 2 ___ 3 or more ___

help!

37

First Class
Permit No. 4
Fort Collins, Colo.

17-4040-2610

S REPLY MAIL
ge Stamp Necessary if Mailed in United States

E WILL BE PAID
ESSEE

Lowell Watts, Director
Extension and Community Services
Administration Building, Room 201
Colorado State University
Fort Collins, Colorado 80523

28

30

TABLE 2

URBAN AND RURAL EXTENSION SERVICE PROGRAMS IN COLORADO

RURAL COUNTY	URBAN COUNTY
1. So far, no aides are being used. There are plans for using paraprofessionals to reach small farms.	1. Aides and paraprofessionals are growing in numbers, with diversity in age, sex, education, and experience. Some are paid; most are volunteers.
2. County agent is the highest officer at the county level. The area director represents two or more counties, and is higher in rank than the county agent.	2. County director is the highest officer at the county level.
3. Greater emphasis on the conventional areas and subjects.	3. Greater emphasis on newer subject matter.
4. Channels for reaching consumers are more one-to-one; little use is made of group meetings. Radio, weekly columns in the newspaper, and slide/tape presentations are used.	4. Channels are mostly mass media and large meetings. TV spots, announcements, workshops, and training materials are used.
5. No formal means of evaluating the quality of service, other than the usual indicators of client feedback, such as repeated visits or calls.	5. Formal evaluation techniques are used to assess quality of service provided.
6. Greater concern with consumer needs and directly answering to issues.	6. Greater concern with the needs of society and the country. Community as a whole is the main focus for extension.

NEW MEXICO EXTENSION SERVICE

Everett M. Rogers
Rekha Agarwala-Rogers

The New Mexico Extension Service is headquartered at New Mexico State University in Las Cruces. New Mexico is a relatively poor state, with few natural resources and only one major metropolitan center (Albuquerque). The state is also distinctive in its three cultures: Hispanic, Anglo, and Indian.

Organizational Arrangements

In size and organizational structure, the New Mexico Extension Service is probably typical of state extension services in relatively poor rural states.

The Director is also the Dean of the College of Agriculture at New Mexico State University and Director of the New Mexico Agricultural Experiment Station. This triple title is intended to encourage research utilization, through the close coupling of research and extension under the direction of one individual. In reality, this administrative arrangement means that most of the direct leadership of the state extension service comes from the Associate Director (Figure 1).

Most of the 30-35 state extension specialists are in agriculture, with four in community resources development, a similar number in home economics, and a couple in 4-H/youth.

The office of Agricultural Information is headed by an editor and staffed by fourteen communication specialists.

There are two district supervisors (one for the northern and one for the southern part of the state); they live in Las Cruces, but spend most of their time visiting the county extension staffs under their direction. There is

very little direct supervision of county staff; one supervisor estimated that he spent less than a total of six hours per county employee per year.

In general, the extension service is a highly decentralized and loosely coupled organization, with much bottom-up power. This arrangement means that the best state supervisor is one who governs least, allowing county-level needs to be pursued by county extension staffs and then bubble up to the state level. One state administrator stated: "Without the support of county extension staff, any extension program is dead."

Perhaps such a low degree of Federal control over state- and county-level units in the Cooperative Extension Service is appropriate, considering the tremendous heterogeneity of climates, crops, and community problems from state-to-state and county-to-county in the United States.

County Extension Staffing

There is wide variation in the size and special abilities of the extension staff in each New Mexico county, depending on the population size, nature of local problems, and agricultural productivity of the county. Here we present the extension staff of two medium-sized New Mexico counties.

The extension staff in Doña Ana County (an agricultural county) consists of the following employees:

1. County extension agent (and director)
   - B.S. in agriculture, M.S. in agricultural economics
   - Responsible for horticulture, agriculture, and overall administrative direction of the county extension program
2. Home economics agent
   - B.S. and M.S. in home economics
   - Responsible for adult homemakers' program, including homemakers' clubs

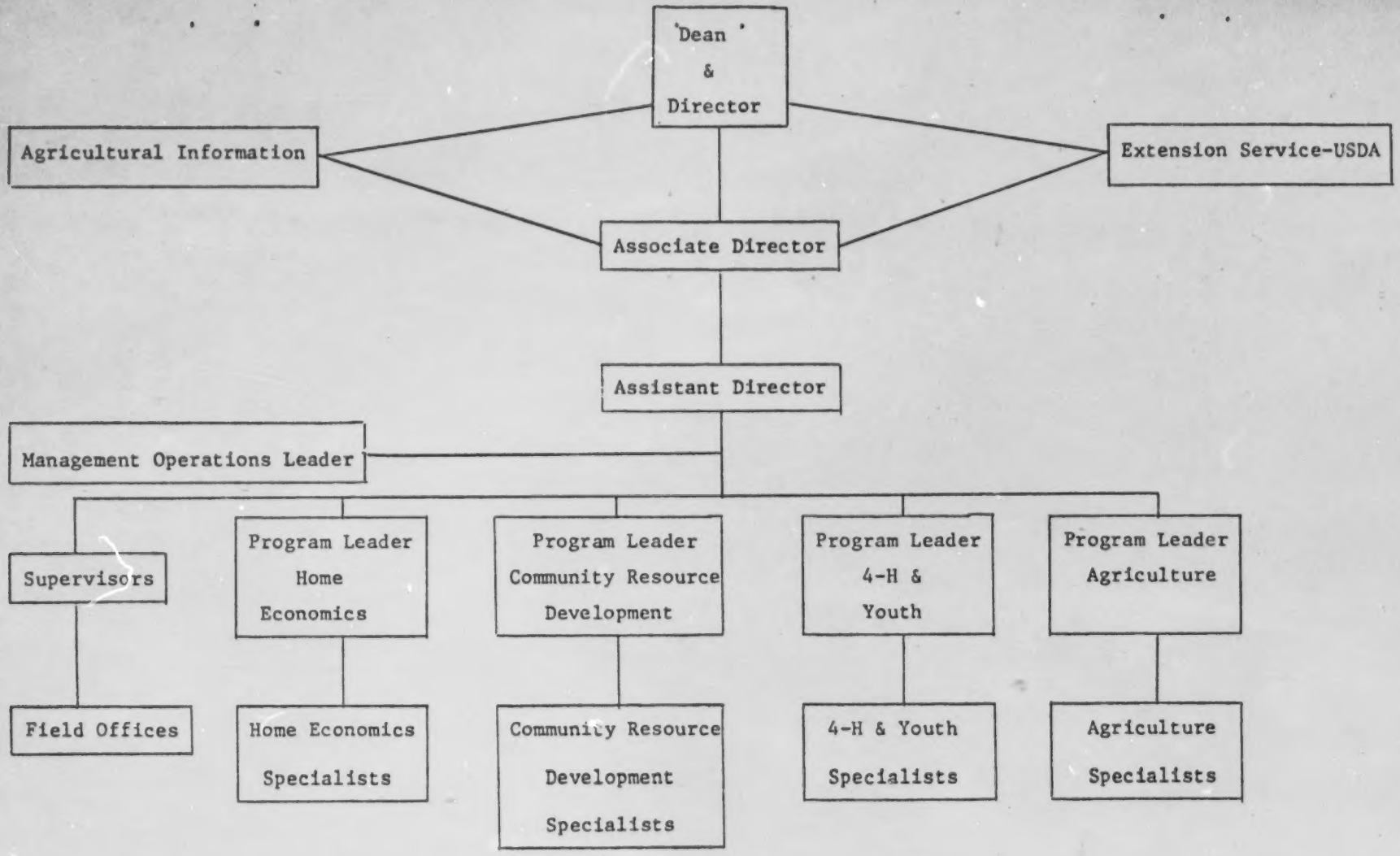

Figure 1. Organizational Structure of the New Mexico Extension Service.

3. Female 4-H agent
   - B.S. in home economics, and M.S. program in education under way
   - Responsible for 4-H club work
4. Male 4-H agent (position temporarily unfilled)
5. Home economics agent (EFNEP)
   - B.S. in home economics, M.A. in education
   - Responsible for supervising thirteen EFNEP aides
6. Thirteen EFNEP aides
   - Formal education ranges from elementary education to a B.A. in social work
   - Each aide enrolls about 130 low-income families
7. Three secretaries (one funded by EFNEP)

In a rural county like Sante Fe without a strong agricultural base, the extension staff consists of:

1. County agricultural agent (and director)
   - B.S. in agriculture, M.S. in extension education
   - Responsible for livestock, horticulture, and agriculture production, community development, and administration
2. Home economics agent
   - B.S. in home economics and graduate work toward a Master's degree in progress
   - Responsible for adult homemaking program plus supervision of six EFNEP aides
3. Female 4-H agent
   - B.S. in home economics and graduate work toward a Master's degree in progress
   - Responsible for female 4-H club program

4. Male 4-H agent
   - B.S. in agriculture plus M.S. in extension education
   - Responsible for male 4-H club program
5. Community development assistant
   - One year of college training
   - Funded by CETA to assist the county agricultural agent in community development work
6. Six EFNEP aides, each responsible for about fifty low-income families
7. Two secretaries
   - High school graduates
   - One secretary with considerable experience handles most of the telephone requests to the county extension office

Sante Fe County today has a total population of about 62,000; 50,000 in the city of Santa Fe and 12,000 in rural areas (most of these are rural-nonfarm). There is some irrigated agriculture (mostly fruit) and cattle-raising in the county, but the main income derives from tourism and state government. At present, there are sixteen 4-H clubs, enrolling about 285 members.

All the Sante Fe County extension staff are bilingual in Spanish/English, an ability that is essential in working with adults, but less so with 4-H youth (almost all of whom prefer English). All extension meetings in one of the nineteen communities in the county are held in Spanish.

Personal Characteristics and Training of Extension Staff

In New Mexico, most large-scale commercial farmers are Anglos; most smaller farmers are Hispanic. Most EFNEP clients, both rural and urban, are Hispanic; hence EFNEP aides and county supervisors must be Spanish-speaking (and ideally of Hispanic ancestry).

In four New Mexico counties, the county director is a home economics agent. One state specialist in agriculture is a female.

The county extension staff in New Mexico are appointed with the academic rank of instructor and assistant professor (if the staff member has about ten years of tenure or more) at New Mexico State University. However, the staff do not publicly use these academic titles in their counties; they feel that if they did, their credibility with their clients would probably be diminished.

State specialists and administrators have academic titles ranging from instructor up to full professor (in academic departments like agronomy, home economics, agricultural economics, etc.). These state extension personnel seldom use their academic titles.

Most county extension staff have Master's degrees or are working toward them, usually at New Mexico State University. All new extension employees at the county level (usually as 4-H agents) must have at least a 2.5 grade point (on a 4.0 scale) to be eligible for admission to graduate work. Most county staff were born in New Mexico, and graduated with B.S. degrees in either agriculture or home economics from New Mexico State University.

In contrast, most state specialists were born and educated in states other than New Mexico; most have Master's degrees and some have the Ph.D. Eventually, all state specialists are expected to obtain the Ph.D. Several (but not nearly all) state specialists have previous county-level experience.

Most county staff do not desire a future as state specialists; they prefer more direct, personal contact with their clients, and wish to avoid the wide travel (and attendant absence from their families) that a state specialist's position requires. A common complaint of both state and county extension staff is the large number of "night meetings" and weekend commitments required by extension work.

New Mexico has few employees responsible for multi-county area assignments (e.g., a community development position serving four contiguous counties). Until quite recently, there were a number of such area positions, but they have been cut back, presumably because the results showed that county- and state-level positions were more effective.

Advantages of University Affiliation

All county and state extension employees (at the professional level) have academic titles at New Mexico State University. These professionals, and the EFNEP aides, are paid directly by the University. In the eyes of these employees, there are several advantages to this university affiliation:

1. Their credibility with their clients is heightened. (The EFNEP aides take special pride in their affiliation with the University.)
2. They are removed from much of the "politics" of county government, including the vagaries of such funding and the possible influence of county supervisors on personnel appointments.
3. The research and educational resources of the university can be brought to bear to back up county extension staff.

There are also advantages for the state univerisity in having its employees in every county of the state:

a. They are effective, although low-key, recruitment agents for university students; this is especially true of the 4-H program.

b. The presence of county extension staff may be an influence on state legislators regarding annual appropriations for the state university.

County Extension Advisory Council

Each county extension staff in the nation is expected to organize an advisory council in order to (1) advise the staff on client needs and (2) evaluate each year's accomplishments in fulfilling the annual program of work. Some county advisory councils meet monthly, others only once per year.

In Sante Fe county the advisory council meets at least twice per year, with the following functions:

1. To support and guide the Sante Fe County Extension staff in determining direction for program development in agriculture, home economics, 4-H and youth, and community resource development.
2. To assist in identifying problems and opportunities in order of importance.
3. To assist in unifying communities on common problems.
4. To assist community leaders in establishing liaison with other agencies or organizations for community resource development.
5. To serve as a forum for public affairs programs for Sante Fe County or any of its communities.
6. To serve the Sante Fe Board of County Commissioners in an advisory capacity concerning the use of the Sante Fe County Recreation Fund.
7. To serve as a support group for the Sante Fe County Extension Service programs.

There are nineteen members of the Sante Fe County Extension Advisory Council, thirteen of whom have Hispanic names.

Membership

District I.....Mrs. Lucy Narvaiz
District II.....Fred Hill-Fern Ueckert
District III.....Pablo Roybal
District IV.....Jack Fronabarger
District V.....Mrs. Vera Henderson
District VI.....Tony H. Quintara
District VII.....George Garcia
District VIII.....Frank Trujillo
District IX.....Francisco Vieira
District X.....David Ortega
District XI.....Elizardo Vigil
District XII.....Juan Romero
Representative at Large.....J. R. Chavez
Urban Representative.....Larry Waterman
Expanded Food and Nutrition.....Sylvia Vasquez
Home Extension Clubs.....Lorraine Livermore
4-H Council.....Lynn Rosales, Tom Jones
Overall Home Economics Planning Committee.....Mrs. Gene Trujillo

Extension Service Staff

Palemon A. Martinez, County Extension Agent
Roberta O. Tellez, County Extension Home Economist
Alan F. Balok, County Extension 4-H Agent
Maria Rita Salazar, County Extension Home Economist 4-H
Jose E. Herrera, CRD Specialist
Mary Roybal, Secretary
Walley Sanchez, Secretary

Officers

Jack Fronabarger, Chairman
Pablo Roybal, Vice-Chairman
Lucy Narvaiz, Secretary

Widening the Scope of the Extension Service

The most important single policy issue facing the Cooperative Extension Service today is whether its scope of educational programs should be widened beyond mainly that of production agriculture and how far the scope should be broadened.*

This issue has a number of historical antecedents:

1. The Smith-Lever Act of 1914, which established the Cooperative Extension Service, did not specifically limit the scope to production agriculture.
2. Since that time, as the extension service has evolved, various programs have been added (home economics, agricultural marketing. consumer marketing, 4-H club work, and community development), although production agriculture remains at the heart of extension's present activities.

As the farm population has contined to decrease in the United States, there have been pressures for the Cooperative Extension Service to move into new program emphases that would mainly benefit rural-nonfarm and urban audiences. But there are also counter-pressures for the extension service to focus primarily on production agriculture.

The narrow-versus-widened scope of the Cooperative Extension Service is diagrammed in Figure 2.

Becoming a University Extension Service

Several states have reorganized their extension service as one component of a "university extension service." This means that the county extension staff

---

* Following the usual convention, we refer to the "Cooperative Extension Service" as consisting of (1) the Federal Extension Service in the USDA and (2) the state extension services.

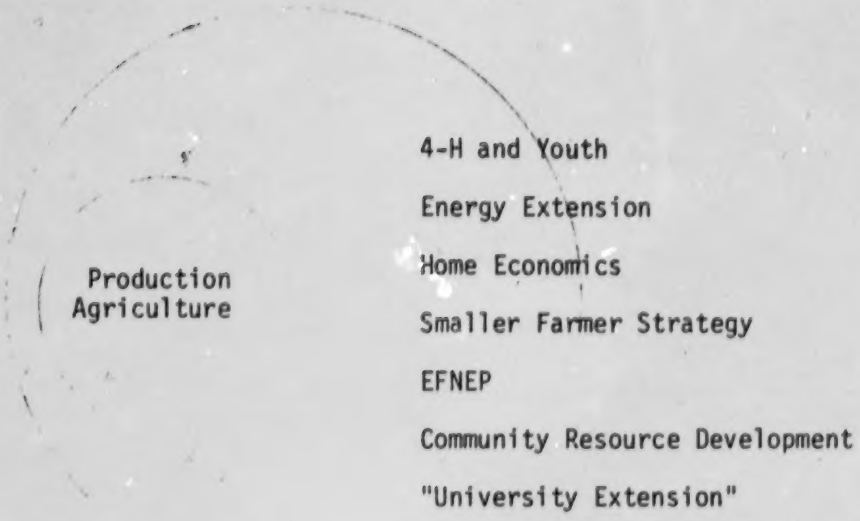

Figure 2. Diagram of the Narrow Scope of Production Agriculture Versus a Widened Scope of the Cooperative Extension Service

have responsibility for all the state university's branches of expertise, in addition to agriculture and home economics. (For example, the county staff would also enroll adult students in correspondence courses at the university, schedule speeches and conferences for various university professors, etc.)

Such broadening of state extension services to become a university extension service occurred in Michigan in the late 1950s and has continued there to the present. Many state extension services are apprehensive of such broadening, however; such is the case in New Mexico today. Extension administrators point to the example of Missouri, where the university extension service had seventy professional positions lopped off by the state legislature, presumably in disapproval of the widened scope that occurred in the early 1960s.

Nevertheless, the broadening of extension's scope to become a university extension service remains a hotly debated topic among extension and state university administrators.

Expanded Food and Nutrition Education Program

Undoubtedly the most radical single change in the Cooperative Extension Service in the past fifty years was the Expanded Food and Nutrition Education Program (EFNEP) launched in 1969.

EFNEP certainly had its roots in the War on Poverty programs of the Federal government in the 1960s; its use of paraprofessional aides and its focus on a target audience of lower-income rural and urban people are evidence of such roots. Many extension professionals bitterly opposed EFNEP in 1969, and some do so today. It was a radical change in almost every respect:

1. EFNEP had almost nothing to do with production agriculture; food and nutrition had previously been given only slight attention by home economists in the extension service.

2. The use of indigenous aides was a "first" in the extension service (although many other Federal programs had successfully used aides for several years prior to 1969). The aides strategy put the professional home economist in the role of supervisor, a new responsibility.
3. The target audience of urban and rural lower-oncome families (with the attendant goal of equity) was a sharp departure from extension's previous focus on prosperous farm families. (with a goal of increased production).
4. The educational method of home visits on an intensive basis with 50-150 clients per aide contrasted with the extention service's prior tendency toward more extensive educational methods, like group meetings and use of the mass media.

EFNEP's 1969 budget has not been expanded by the USDA; in the face of inflation, this means that the actual size of the EFNEP has decreased by about 25 or 30 percent. But it is important that EFNEP brought its own funding with it to the Cooperative Extension Service (otherwise it certainly would not have been accepted and institutionalized).

Most EFNEP aides assist their client families with a wide variety of problems that range far beyond food and nutrition: family planning, family dissolution, handicapped children, etc. Many aides refer their clients to other local agencies for assistance the aide cannot provide. USDA administrators of the EFNEP exert strong pressures to limit the program to a strict definition of "foods and nutrition," but without much success.

Lessons from EFNEP (and from extensions of the agricultural extension model to developing countries in Latin America, Africa, and Asia) may be drawn

for a future extension program aimed at smaller farmers. Such a smaller-farmer development strategy would certainly focus on the use of aides and on program areas such as off-farm employment, agricultural credit, and topics other than just production agriculture.

Such a smaller-farmer strategy is said to be a likely priority for the Carter administration.

Community Development in Sante Fe County

We stated previously that Sante Fe County does not have a rich agricultural base. Perhaps in part as a result, the county extension program places much emphasis upon community resource development.

There are nineteen rural communities in the county, in addition to the city of Santa Fe. Each rural community has a community development association, organizationally serviced by the county agent. All nineteen associations are formed into a county community development council, which meets monthly. The problems attacked by these community development associations range from building parks to securing improved telephone service. Few have much to do with production agriculture.

This emphasis upon community development in Sante Fe County's extension program began about twenty years ago, and continues to this day.

Forces for a Wider Scope in Extension

These major factors are likely to promote a wider scope for the Cooperative Extension Service:

1. Population trends, especially the decline in the number of farm people in the United States.
2. Pressures toward greater attention to the poor as a means of creating greater equity.

3. Social problems of high national priority, such as energy conservation, in which the Cooperative Extension Service might play a role.*
4. Present extension employees at the county level typically have added graduate training in the applied social sciences and in education to their undergraduate degrees in agriculture and home economics. Such training prepares them to work in wider-scope areas, such as community development.
5. The emerging needs of local communities, as reflected through county extension advisory councils to county extension staff to the state and Federal level. Many of these needs do not deal with production agriculture.

Counter-Forces for a Narrow Scope in Extension

These major counter-forces suggest a narrow scope on production in the agriculture extension service:

1. The recent reorganization of the Federal Extension Service in the USDA places extension along with agricultural research under one official. Consequently, extension is more closely tied to the narrower agricultural production circle. A similar reorganization of extension and research under one official has happened or is occurring in many states; examples include California, Colorado, and New Mexico. Such an organizational unification of production and utilization, primarily motivated by a greater emphasis on research

---

* In mid-1977, ten states were awarded ERDA grants for Mountain Energy Extension Service, to be expanded to all fifty states within about one year.

1. (Continued)

   utilization, also forces the Cooperative Extension Service toward the scope of the smaller circle of production agriculture. So the USDA is pressuring the Cooperative Extension Service to restrict its scope, with less emphasis on 4-H and youth, home economics (including EFNEP), and community development.

2. The American Farm Bureau Federation (AFBF) has been a strong supporter of the Cooperative Extension Service; the AFBF's members are mainly commercial farmers.

3. The undergraduate training of extension employees has been in agriculture and home economics; the tendency is for them to work most heavily in these areas, where they are most comfortable and where their credibility is already established.

4. The organization of state extension services has been located in colleges of agriculture in state universities, rather than in university extension or in adult education.

Career Paths and Rewards

Here we present three individuals' career paths in the extension service, in order to describe how advancement typically occurs.

A county agricultural agent followed this route:

1. B.S. degree in agriculture in 1957.
2. Employed as county 4-H agent in County A for eleven years.
3. Promoted to a four-county area (including County A) position in resource conservation and development for five years.

4. Employed as county agricultural agent in County A for four years (upon retirement of his predecessor).

A county home economics agent had this career:

1. B.S. degree in home economics in 1954.
2. Employed as county 4-H agent in County A for six years, until her husband moved to County B and she had to resign from the Extension Service.
3. Employed as a county home economist for three years by a public utility company.
4. Employed by a county home economics agent in County B for eight years, until the present (during which time she also earned her Master's degree).

The career path of a state extension director illustrates the importance of working up through "the ranks" so as to gain experience in a variety of positions, and of earning postgraduate degrees:

1. B.S. degree in agriculture from a state university in State A.
2. Employed for three years as a county 4-H agent in State A.
3. Two years of military service.
4. M.S. degree in animal science (with a social science minor) at a state university in State B (1.5 years).
5. Employed for five years as a county agricultural agent in State B.
6. Employed for three years as an area community development specialist in State B.
7. Enrolled for a Ph.D. in extension education (with a minor in sociology and speech communication) at a state university in State C (three years).

8. Employed for four years as an extension district supervisor in State B.
9. Promoted to State Extension Director in State D (a smaller neighboring state of State B).

Mass Communication Channels

A major trend in county extension activities is toward greater use of mass media to reach broader audiences than those once contacted mainly by home/farm visits. This shift away from personal visits is due to several factors:

1. Many more clients now seek assistance by coming to the county extension office. A tremendous increase in telephone calls has occurred; Sante Fe County now receives about 100 such calls per day. (Many of these requests for information are handled by a secretary.)
2. Much more paper work is now required of county staff; for instance, estimates must be made of the ethnic and socio-economic make-up of audiences at extension meetings. These reports feed into EMIS (a nationwide management information system in the Cooperative Extension Service).
3. Travel funds (for automobiles) are restricted.
4. Paraprofessional aides are now available in extension for home/farm visiting.

Much use is made of mass media by extension employees. For instance, Sante Fe County's staff broadcast a weekly radio show and write a weekly newspaper column. In addition, spot advertisements for meetings and services are broadcast on the five local radio stations. The county extension office is

well-equipped with a slide projector, film projector, tape recorder, etc. Training in use of the media is given to county staff by specialists from the state-level Office of Agricultural Information.

NEW YORK COOPERATIVE EXTENSION SERVICE

Kay Magill

New York's Cooperative Extension's statewide activities are based at Cornell University in Ithaca, where the New York State College of Agriculture and Life Sciences and the New York State College of Human Ecology are located. The resource bases of Cooperative Extension are found in the State Colleges of Agriculture and Life Sciences and of Human Ecology, the Cornell University Agricultural Experiment Station, the New York State Agricultural Experiment Station at Geneva, and the USDA.

Organizational Arrangements

Cooperative Extension is the mechanism for extending and interpreting research conducted at Cornell for the people of New York State. The information delivery system involves professionals and support staff on the state, regional, and county level. New York's extension system is unusual in that there is an extremely high level of financial, programmatic, and advisory support at the county level. This ensures that Cooperative Extension programs will be especially responsive to local needs. A second notable feature of the New York system is that the state is very populous and urban-oriented in addition to being a large agricultural producer; the focus of extension is toward the wide audience found in the state as a whole, not solely toward the rural or farm person.

Organization of the Office of the Director

The head of the state administration is the Director. Reporting directly to him are two Associate Directors with program responsibilities, along with three Assistant Directors with administrative and program responsibilities.

Program Coordinators working with the Associate Directors are the formal links between faculty members and administration and between faculty members and field staff.

However, informal communication is by far the most common form of information exchange in the system. Very little is done through channels, and the lines defining organizational responsibilities are often blurred. It is possible for the most junior agent to go to the most senior staffer to get something done. Only with regard to college financial matters is one required to go through channels. There are few leaders, with most of the work being done through a team effort. The staff of the Office of the Director meet once a week to share information.

The office of the Director has the following responsibilities:

1. Hiring;
2. Maintenance of the payroll system;
3. Approval of changes in county constitutions and by-laws (each county has its own administration);
4. Issuance of pay guidelines; and
5. Issuance of management policy guidelines (there is about 80% compliance with policies recommended by the state).

The flow of information regarding administrative matters is almost always in the direction of state to county.

Organization of Research and Teaching Staff

The philosophy of the current administration is to organize faculty specialists within college departments rather than under the extension administration. The logic behind this is that research initiated within a department should be taught by that department. One result of this kind of organization has been a decrease in administrative staff.

A faculty member may have a single appointment in research (Research Associate), teaching (Instructor), or extension (Extension Associate). People who are Assistant Professors or above have joint appointments (some combination of research, teaching, and extension, usually two of the three) and are part of the university voting faculty.

The formal mechanisms of information exchange are the Inter-Departmental Program Committees (IPC's) in Agriculture, and Agent/Faculty Committees in Human Ecology. (There is little need for interdepartmental efforts in Human Ecology, since the departments in that college cross over many disciplines and the diversity within a department is great.) These committees consist of faculty members appointed by the Director and field people elected by the field staff. The responsibilities of faculty/agent committees are to:

- Identify priorities (in the ongoing situation);
- Develop program resources; and
- Train agents.

Program Coordinators formally link the above committees to the Office of the Director, although there are numerous informal links. The extension administration provides the minutes of committee meetings, and thus has a record over time of committee activities.

Some departments and faculty members have more direct communication mechanisms than committees (e.g., dairy days at Cornell, individual conferences). Formerly, information went directly from the state to the public, but now it normally goes to the public through county agents. Faculty members are deeply involved in inservice training of field staff, which includes the presentation of research-based information.

Specialists

Extension Representatives (ER's) are administrative specialists who work with County Coordinators to facilitate administrative planning and procedures. The state is divided into six districts, with an ER for each district, giving each ER nine or ten counties. ER's coordinate statewide management policies, make recommendations on legal matters, and report priorities to the counties (although they usually do not attempt to enforce state-set priorities). They also have administrative responsibility for regional programs.

Area specialists are usually administered by Cornell, but most of their funding comes from the counties or regions they serve. Specialists usually work for a region or group of counties rather than for one county. Sometimes a specialist hired by one county will be contracted out to other counties. Many counties trade the services of specialists informally, with no cash exchange. A more formal, written arrangement between counties may also be arranged. There are only three or four specialists with statewide responsibilities.

A regional specialist usually works closely with an Advisory Committee made up of representatives of each group he/she serves. For example, the Fruit Advisory Committee of the Regional Lake Ontario Fruit Program is made up of growers, fresh food buyers, processors, bankers, and members of growers' organizations. This committee meets formally once or twice a year, but the specialist is in frequent informal contact with members throughout the year. The specialist looks to committee members and area leaders for concerns relating to the industry's problems. He/she can then conduct any required research in the field (rarely) or refer the problem to the researchers at the university.

Organization of the County Organization

A special provision of state law authorizes the establishment of County Associations in each of New York's fifty-seven counties. County associations are public, nonprofit associations, independent of the county government. They own their own property, enter into contracts, operate according to their own constitutions and by-laws, and decide their own personnel policies.

The County Association is run by a Board of Directors, usually elected by enrollees in the Association. A Board of Directors is typically made up of members from each of the county's program advisory committees, an extension representative from Cornell, members-at-large, and a county legislator. The Board is the primary policy-making body for the Association, with responsibilities in the areas of budget, personnel, nominations and elections, and program priorities (Figure 1, page 6).

The County Coordinator often has both administrative and program responsibilities; only about five New York counties have a coordinator with administrative duties only.

The key program planning mechanism is the Program Advisory Committee, working with the County Agent. Members of the local community are elected or selected to serve on this committee and help to identify local problems, as well as guide the efforts of the agents. Most counties have Program Leaders and Advisory Committees in the traditional areas of agriculture, home economics, and 4-H, and often have Community Resource Development advisory committees.

Human Resources

Administrative Staff

Most of the state administrative staff worked their way up through the ranks of the extension service. (One outstanding exception to this is the

ORGANIZATIONAL CHART

COOPERATIVE EXTENSION ASSOCIATION OF ONONDAGA COUNTY

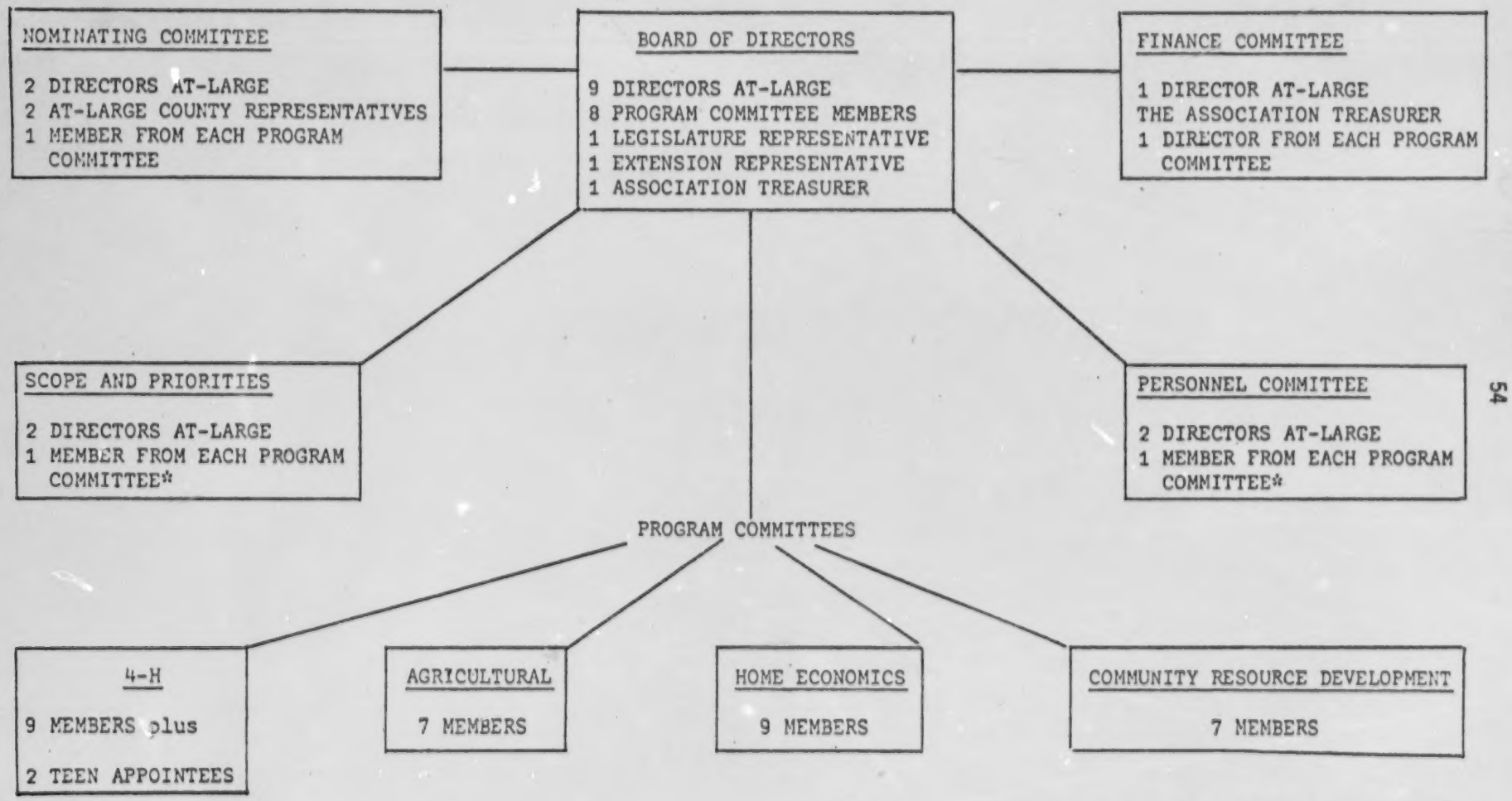

Figure 1. Organization Chart of a Typical New York County Extension Association.

* MAY OR MAY NOT BE A DIRECTOR

Director who, atypically, moved right into the position of Extension Director from a teaching and research appointment in the Graduate School of Nutrition.) Typically they had grown up on farms (and/or belonged to 4-H) and worked as county-level agents in New York State before moving on to administrative positions. All administrative staff have at least a Master's degree and a number have Ph.D.'s. Educational background is generally in agricultural fields, home economics, education, or extension.

Although it is not required, all but one of the Extension Representatives have come through extension. The position does require a Master's or its equivalent, and all six of the ER's have at least a Master's, while one has a Ph.D. They are strongly encouraged to pursue both formal and informal study, and are given inservice training opportunities.

Administrators (including the Extension Representatives and Program Co-ordinators) and the handful of off-campus specialists with state-wide responsibilities are employees of the state college.

County Professional Staff

All personnel at the county level are employees of the County Associations. Cornell is responsible for advertising professional job openings, recruitment, and screening. However, the final selection is made by the Board of Directors of the County Association.

County agents are usually required to have at least a Bachelor's degree. A Master's degree is necessary for the position of County Coordinator, although there is at least one coordinator whose long experience in farming, management, and politics was accepted as the equivalent of a Master's degree.

Reward Structure

Most agents stay in one area throughout their extension careers (as opposed to starting in one area, such as 4-H, and moving up through other program areas). Agents progress from assistant agent to program leader within their area of specialization. Advancement may involve moving to a county with a higher pay scale. (However, most counties pay the going rate in order to attract qualified personnel.) Beyond that, people move up to the university. County specialists are sought after by industry, where the pay is much higher than in Cooperative Extension.

If the county adopts the policy recommended by Cornell, an employee may take a six month sabbatical after six years. The state will also reimburse tuition for three credit hours taken over a two-year period; these credits may be from either a state or a private college.

Participation in inservice training is encouraged but not required. Each county budget includes travel funds which may be used for travel to Ithaca for inservice training, as well as to other parts of the state for professional meetings, etc. Agents may attend programs relevant to their own county's needs and priorities.

County Support Staff

The county support staff is hired directly by the County Association. Support staff includes Expanded Food and Nutrition Program (EFNEP) aides, 4-H representatives, and secretaries. EFNEP aides must live in the neighborhood they are to work in; there are no further educational or personal requirements. Representatives of 4-H organize local clubs and find 4-H leaders. Requirements for this position vary from county to county. Use of paraprofessionals depends upon the financial resources and program priorities of the County Association.

Financial Support

Cooperative Extension is supported financially by Federal, state, and county governments. In contrast with most other state extension services, county governments contribute an extremely high share of the funding of county and regional programs. In Ontario County, for instance, more than one-third of the total support and two-thirds of the cost support for the county extension service comes from the county; in Onondaga, the county provides 42% of the County Association's funds. Overall in the state, county funds make up 46% of the total, with state funds making up 20% and federal funds, 35% (Figure 2, page 10).

County Associations may also obtain local financial support by charging membership fees, as well as charging for classes or publications, writing proposals, and contracting for regional services.

Programs

Approximately two-thirds of the extension service's time and resources are devoted to agriculture and 4-H, with about one-third going toward areas related to human ecology and home economics. New York Cooperative Extension is trying to get away from what they call the "Papa Bear, Mama Bear, and Baby Bear" (agriculture, home economics, 4-H) complex, and is devoting considerable energy attending to the needs of both rural and urban clients.

Program needs may be identified by either the college or the field. There are state-wide objectives for Cooperative Extension, but there is great variation from county to county in the extent to which these objectives are met. The university may encourage a county to become involved in certain programs, but does not usually exert any pressure. However, there are two

Allocations of funds regularly appropriated
to New York State Cooperative Extension
1977-1978

Type of Fund	Appropriation	Allocations			
	Total	Colleges	Field Programs		
			Regional Specialists	Associations	N.Y. City
FEDERAL					
Smith-Lever Formula	$3,889,695	$2,380,790	$487,709	$857,378	$163,818
Expanded Nutrition	2,701,222	328,476		1,653,450	719,296
Urban Gardening	500,000	46,956			453,044
4-H Program	225,451	73,829	14,477	67,145	70,000
Rural Development	30,909		30,909		
Farm Safety	20,000	20,000			
Resource Conservation and Development	12,273	12,273			
Rural Dev. Act of 1972 Title V	67,562	29,562	33,000	5,000	
Small and Part-Time Farmers	30,469	30,469			
TOTAL FEDERAL	$7,477,581	$2,922,355	$566,095	$2,582,973	$1,406,158
STATE					
Regular	3,324,600	3,218,944	69,544		36,112
Sec. 224, County Law	1,237,000			1,237,000	
TOTAL STATE	$4,561,600	$3,218,944	$69,544	$1,237,000	$36,112
ASSOCIATIONS	10,333,144	24,160	433,242	9,875,742	
TOTAL ALL FUNDS	$22,372,325	$6,165,459	$1,068,881	$13,695,715	$1,442,270
PERCENT OF TOTAL	100	28	5	61	6

Figure 2

58

interrelated financial forces operating to persuade counties to participate in state and Federal priority programs. The first is that much of the Federal money channeled to the counties is earmarked for specific purposes (e.g., Expanded Food and Nutrition, Urban Gardening, 4-H). The second is that state-level faculty specialists and staff may develop materials and training programs for very high-priority campaigns (such as their recent Energy Program), and make them available to County Associations free or at cost. In both situations, the County Association receives funds or materials with little or no effort on its part. County agents seem to feel that it is wasteful and/or foolish if one does not take advantage of existing programs.

The process of ascertaining needs and initiating programs from the "top-down" is best exemplified by the Energy Program implemented in Fall, 1977. The Energy Task Force at Cornell, comprised of senior faculty, had studied the issue since about 1973. The Task Force developed and implemented a campaign that utilized Cooperative Extension's unique state-wide network. It was considered so important an issue that it was pushed on the county associations without debate; county workers were told in advance that the campaign was coming and that they should be prepared to move with it. No new funding was necessary nor was any technological preparation required. The campaign simply took advantage of the existing network to disseminate information to consumers through agents and specialists.

An extreme case of "bottom-up" innovation occurred with the development of a new system for growing apples in western New York. The Regional Fruit Specialist (Richard Norton) worked on his own with farmers and nursery owners over a period of 10-12 years, experimenting with and demonstrating the new apple planting system. Funding and sponsorship came from the field; Norton

convinced nursery owners to donate trees, farmers to donate land and equipment, and growers to tax themselves (through their grower's association) to provide the specialists' team with private funding. It was some time before researchers at the experiment station became involved, although eventually there was some cooperative effort in conducting and disseminating the research. (Norton won the USDA Superior Service Award in 1975 and is recognized throughout Cooperative Extension as an exceptional extension worker.) Normally there is no relationship between the agent and the experiment station other than personal inclination to work together. Most of the research conducted by agents is part of their graduate study at Cornell, under faculty supervision, although it is possible for agents to do some field research. Usually, however, agents lack the time (and sometimes the training) to do field research.

In less extreme situations, programs will be developed because somebody on the staff sees a need and is in a position to know what resources are available. This "broker" can be anywhere in the system. This process occurred in the initiation of a pilot project in New York City on family day care.

The program was implemented by faculty resources and leadership. A new facility "on neutral ground" was established; this is not especially typical. The project began with USDA Special Needs money, and eventually got private funding. Materials were developed at the university and tested in the field with the agents and clients who would use them. The entire operation was a team effort, involving staff from every level of Cooperative Extension.

Communication Strategies

Cooperative Extension workers are continually looking for new communications techniques. Traditional ways of communicating agricultural information no longer work, primarily because farmers now have interests outside the farm

that compete with extension services for their attention (not the least of which is television programming from urban centers). Agricultural information is becoming increasingly technical, and is difficult to reduce into short brochures and newsletters. Lengthy and more indepth brochures demand more attention and time than most people are willing to give. Agricultural workers have found no good mass techniques for reaching the relatively small audience for their services. Urban extension workers have had to develop strategies in order to reach clients who are not traditional consumers of Cooperative Extension services.

Both state and county people make much use of the media. Faculty develop materials for their own use in training field staff and for kits that the agents can use in the field. Perhaps the most-used media are still photographs and slides. Also used are cassettes, flip charts, comic books, and, to a much lesser extent, film and videotape. Materials developed for use in the field are sometimes pre-tested by having agents try them out in their own counties. Field testing usually involves determining who the audience is and what the intended effect is.

County agents report extensive use of mass media. They produce many publications, including specialized service letters, project reports, fact sheets, and announcements of programs and services. Recently, fewer materials have been sent to clients because of cutbacks in the extension service's franking privileges. However, there is still considerable distribution of county-produced print materials in the community. County workers also distribute kits and materials developed at the state level.

Radio is used a great deal. Rural counties usually have an agricultural report and/or farm bulletins. Specialists in the Rochester area, for example,

use a very powerful radio station to report daily weather conditions and what farmers should do that particular day. Urban areas do consumer spots and programs.

Television is also used, although this is more common in urban areas. Onondaga County has an agent who coordinates mass media activities and acts as a contact person for the media. Among the county's television activities are public service announcements, consumer reports during news programs, and appearances on talk shows and other locally produced programs.

Public service time in both radio and television is getting tighter, and production of programs requires considerable staff time and resources. Counties consider mass media to be a good investment, however; television and radio are seen to be effective ways of communicating to a large number of people. They have the additional effect of increasing awareness of extension services, which frequently builds local support (including financial support).

The Lake Ontario Regional Fruit Specialists produce a daily recorded message during the growing season on what to do that day. Farmers can call for this message any time during the day from several local phone numbers. This system has the advantage over radio that the message can be changed if the weather changes during the day. Counters on the phones keep track of the number of calls received, and indicate that the messages are extremely well-used.

Interpersonal communication, of course, is at the heart of the county agent's work. Agents must be able to teach, relay information, and interpret research and agricultural law. Communication skills are considered essential.

Program efforts are a good way for the extension service to get involved in the community; programs such as Community Resource Development and Local

Government have proved to be especially effective in this way. Programs such as 4-H are highly visible and agents have considerable personal dealings with local people participating in 4-H sponsored events, such as the county fair.

Inservice Training

The mission of the land-grant college is to disseminate research conducted on the campus. One of the mechanisms used in New York State to disseminate research-based information is inservice training of field staff by faculty. Inservice training is informal (noncredit) education conducted on the Cornell campus or at a regional center. Faculty members present research, develop materials that agents can use in their work, and teach the field staff how to teach.

There is an Inservice Education Committee for each state program. The composition of these committees varies depending on the program; usually committee members are faculty, Program Coordinators, and other specialists. The chairpersons of these committees serve on the College Inservice Education Steering Committee. This committee was originally intended to coordinate the efforts of the faculty members in training agents, but it has evolved into a policy-making body. The task of coordination now falls to the Staff Development Officer, who works with the Steering Committee and an Advisory Committee.

Each county budget includes travel money, which may be used for travel to Ithaca for inservice training, to other parts of the state for professional meetings, etc. Agents are encouraged but not required to participate in training sessions. The keeping of attendance at training sessions is a new development; this is helpful to counties interested in hiring that need to know what

training particular people have. Attendance records show that agents average eight days per year in inservice training. (The maximum number of days allowed is approximately twenty-five.) In light of this, in the near future the Office of the Director will be considering (1) whether this is enough time spent in training, and (2) whether faculty participation in a large number of inservice programs constitutes the best expenditure of their teaching time.

The content of inservice training is determined by the kinds of research being conducted on campus and by the needs of the agents. If some needs are not being taken care of, the Program Coordinators will bring them to the attention of the Staff Development Officer; some kind of response (such as a specific training program or an individual conference with a faculty member) will be made.

Inservice training may take place in a county, if there will be a multiplier effect in doing so; but this is not common. Almost all training takes place at Cornell or a regional center. A faculty member will occasionally go out and teach clients directly.

Once a year, in late February or early March, there is a week-long training program held at Cornell. The purpose of this In-Depth Study Week is somewhat different from that of the other training programs. Rather than being a how-to-do-it course, with immediate job-related applications, the study week teaches concepts and skills with long-range usefulness. Field staff attend classes, laboratories, and workshops for intensive study in a given area. Graduate students from the college often sit in on these classes; extension personnel are usually not able to sit in on regular classes because their schedules are so full. Faculty see the value in this program and the high degree of interest it generates, and are very involved in it.

The number of agents who present their research during this week is growing. Agents who have done advanced study, usually as part of a graduate program at Cornell, conduct sessions under faculty sponsorship. It is difficult for agents to conduct research on their own without university support and sponsorship.

There is always an evaluation of the In-Depth Study Week. Beyond this, most evaluation of inservice training is informal. Those responsible for developing the programs rely heavily on their perceptions of the level of enthusiasm and interest. A formal evaluation of the effect of inservice training on county programs is currently being conducted by a graduate student in the college.

According to the Smith-Lever Act, extension is informal education. A professor paid with Smith-Lever funds cannot offer an extension course for college credit. It is sometimes possible to rearrange funds so that there will not be a conflict, although it is still difficult to obtain credit for extension courses.

If a county adopts the policy recommended by the state, an employee may take a six-month sabbatical after working for six years. The state will reimburse tuition for three credit hours taken in a two-year period; these credits may be earned at a state or private college.

WISCONSIN COOPERATIVE EXTENSION SERVICE

C. L. Hutchins

Organization

The University of Wisconsin's Extension System is unique. It unifies extension services across the state in agriculture, business, government and community development, natural resources, family education, engineering, health sciences, human development, youth development, and social services. To support programs in these areas, it also operates a very large communication network, including a state-wide telecommunications system, audiovisual program, and independent study activities. As a result, all of the citizens of Wisconsin have access to a broad array of services in their local communities through a regionally coordinated extension service.

"Agents" are of many types. There are generalists, who work in a number of fields, serving a single county; there are agents in specific program areas--such as health sciences--who serve either single counties or multi-county areas. These field agents are backed up by "specialists," who develop and coordinate programs in specific areas across the state.

Organizational structures exist at the state and county levels; field agents are also subject to coordination at a sub-state regional level. The statewide organization is part of the University of Wisconsin. Wisconsin's higher education system is a single university, with campuses across the state. Madison is the largest campus; Milwaukee's is second largest. University Extension is the third largest "campus" or "college," even though it is spread across the state. This unified system is relatively new; it was established in 1966. The county-level structure is subject to a unique Wisconsin county

government structure. Relatively large "assemblies" are elected to run the county government. Fifty persons or more may be elected to a single county assembly. They are formed into committees to work on county problems--highway safety, etc. Extension is one of the standing committee areas. This committee is charged with developing a county plan for the expenditure of county, state, and Federal money in the area of extension. The committee's plan is reviewed by the university extension. Since the budget is developed in consultation with the professional staff at the county level, it seldom meets any direct objections during the state review process. The work of the county committees is supplemented by advisory groups, working with the elected county committee and the professional staff of the county extension service. These advisory groups are organized into a large number of areas, such as dairy farming, health sciences, education, etc. The advisory committee structure and membership varies periodically to meet the changing interests of the community.

Probably the other most important group formally involved in the system is the State Legislature; it has budgeting power over the university and, therefore, the state extension budget. There are some fairly well-established processes for making this relationship work. The county advisory committees present the benefits of extension to the legislature. For the most part, professionals in the field do not lobby directly, although there are many informal ties that can be used when appropriate.

Coordination

Coordination is achieved vertically and horizontally within the system. Guidelines from the state suggest program areas; counties originate their own

specific plans, which are approved at the state level; and, to the extent that a specific program is partially supported by Federal monies, it is subject to review by the appropriate Federal agency. Coordination is also provided horizontally, through peer-level processes at each level within the system. As indicated, the county extension committees frequently have ad hoc advisory councils in specific areas, such as business and industry, dairy operations, education, etc. The professional staff are in frequent contact with their peers in other county offices, through publications, state-wide training programs, and professional review (for tenure, etc.). The communications program operated by the system provides a state-wide audio network that allows for a considerable amount of inservice and coordination activity.

Financing

The county contributes about 40 percent of the resources used to operate the system; the remaining 60 percent comes from state and Federal monies combined. The Federal resources come from many agencies, not just the USDA. There is no separate accounting for the various monetary sources; the money is pooled and managed as a single budget--except in the case of some special Federal or state extension services. Counties may reject a Federal or state program, although this may mean the loss of money earmarked for that program. They can also initiate new programs entitled to state support. In addition, if two counties agree on the need for a new program, but do not have sufficient resources to support it, they can request financing from the state; if provided, this money comes at no cost to either county--primarily because the joint bookkeeping is viewed as being too expensive.

Program Development

The Wisconsin people are careful not to identify their cooperative extension programs--even the ones sponsored by USDA--as uniquely agricultural. Doubtless they are proud of their inheritance from agriculture, but they indicate that less than half of USDA's co-op extension program is agricultural in nature. (There are large USDA-sponsored youth programs, home economics programs, and natural resources management efforts that are not agricultural.) Much of the USDA-sponsored work involves service in urban areas or service to clients without regard to location or occupation. This is said to be true across the nation for most cooperative extension programs--but it is even more the case for Wisconsin, because of that state's broader, unified program in non-USDA areas. Because of this broad range of program areas and the diversity of structure and funding, program ideas can come from many places. For example, as previously indicated, a county can initiate a special program in any area. If a county has a need for the training of health professionals on a county-wide basis, it can put such a program into its budget. Also, as indicated, two or more counties may undertake a joint program in any area by requesting support from the state. The state seldom mandates a program, although its ability to hire and fire, approve budgets, etc., allows it considerable power in suggesting new program areas to the county. The state assumes a leadership role directing the system as a whole into new areas. There is a political check and balance in this process, however, since the state-wide budget is subject to approval by the State Legislature, and no one at the state level would be overly anxious to mandate a program that would not be acceptable to county governments.

Federal programs are initiated on a "carrot and stick" basis; that is, extra money is available for new initiatives, and sometimes there are negative

incentives for refusing to cooperate. For example, the Environmental Protection Agency (through Congressional intervention) is using the Co-op Extension Service of USDA to operate its pesticide certification program. (All agricultural workers involved in using certain pesticides must be certified.) The Wisconsin State Department of Agriculture, acting in a regulatory role, does the certification; but the extension service provides the educational courses to meet certification requirements. To be eligible for the Federal money, the state and counties had to accept the program. They had little power to reject it, however, because access to many chemicals depends on certification and the agricultural workers need the training to get the certification.

The mandatory character of the health and nutrition programs of USDA provides an example of even greater coercion. Congress mandated that a certain portion of co-op extension's budget be used for nutrition among the poor. The state could have refused the money; but it was not "extra" money, so its refusal would have resulted in significant cutbacks.

Many other Federal agencies have initiated programs that are strictly voluntary. HEW has several that have resulted either from successful bids on competitive procurements or from state decisions to deploy state-apportioned grant resources through the University Extension Service. An Energy Extension Service now being developed by the DOE (ERDA) is an example of the former. It is intended to be a nationwide extension service operated by ERDA. But they have contracted with the University of Wisconsin to operate a pilot program (one of ten) prior to national implementation. Several health programs are examples of decisions to use HEW-allocated or formula money to support extension.

Despite the proactive character of many of the funding agencies, the extension service tries to protect itself from any direct political activity, including the undertaking of any program that has a political character. For example, extension personnel will not take sides on political issues (such as school consolidation), even though the governor, State Legislature, or USDA will sometimes try to pressure them into doing so. They are very insistent that theirs is a non-advocacy, non-political, educational role. They want to provide the client with options. For example, the state wanted to mandate state-wide "dairy house" standards, and wanted the university to get involved in promoting those standards. Instead, they were forceful enough with the legislature and other political leaders to ensure that what they did was to provide the farmers with information on optional ways they could improve the productivity of their dairy herds--improved "dairy house" conditions was one of them. They believe they were much more successful and faster with this approach than they would have been by supporting new standards; apparently, they were, for the state dropped the effort to develop such standards. Neither do they have any approval mechanisms for certifying or selecting specific research outcomes for utilization. The focus, at least as identified at the state level, is on options.

The Agents

Because of the broad range of programs covered by the extension system, it is difficult to generalize about the nature, training, and professional development of people working in the system. All of them are employees of the University of Wisconsin, and most are professionals. They are all assigned to the Chancellor of Extension, who acts very much as the head of a college, answering directly to the President of the University. The "college" has its

own departments, department chairman, faculty senate, rules for assigning tenure, promotions, etc. The faculty are independent of the regular academic departments on each of the campuses of the University. For example, extension agents working in education answer to a coordinator or dean of education programs within extension, not to the college of education. This arrangement overcomes much of the difficulty experienced by extension workers in many states where their service role (as distinguished from a research or teaching role) is frequently not rewarded through tenure, salary advancements, and the like. In Wisconsin, service is appropriately recognized in terms of the traditional academic incentives.

The background of the extension workers is broad, reflecting the breadth of the program areas. Some are generalists, working in county offices to set up programs in any area (not just agriculture). Some are assigned to special audiences--youth, the elderly, the poor. Some are assigned to special areas--environmental education, business and industry, agriculture, health sciences. Generally speaking, the background of people in these areas represents a more or less traditional academic and work experience appropriate to that area.

Professional development is keyed to program requirements. If a new activity is added to the work of the generalist agents, they are provided with inservice training to gain the necessary skills or knowledge.

The statewide communications network is an important element in this in-service effort. Each of the regional centers is connected to a central audio distribution system having many technological refinements, such as tele-writers that permit large-scale, rapid inservice programs. The state-wide television system operated by extension is also available for some of these functions. If a new program area is highly specialized, they simply employ new people in that area, rather than retraining former staff.

In addition to specific inservice training, general professional development is handled through publications and professional meetings, on a statewide and/or regional basis. For example, in health there is a statewide annual meeting and monthly regional meetings. (Research specialists and extension workers meet jointly.)

As might be expected, the reorganization of extension and the new program thrusts during the last decade have caused some distress among "old timers" in the extension service. State leaders feel that this distress has resulted from the fact that, over the past 20-30 years, cooperative extension has gradually slipped into activities that more and more serve the "haves" rather than the "have nots" and those clients of higher, rather than lower, socio-economic status. The original thrust of cooperative extension was especially to the "have nots," so in the leaders' view, the recent shifts are only a return to the original mission and focus, rather than a "new thrust." The changing focus has created a new class of extension agents who are paraprofessionals; an example is the Expanded Food and Nutrition Education Program (EFNEP).

Relations of University of Wisconsin Extension and the State Department of Education in Wisconsin

The University people tend to regard the SEA as a regulatory agency. That traditional role is also observed in Wisconsin for many other state agencies. There are natural coordination mechanisms based on this regulatory role of the SEA. For example, the Chief of SEA sits on the University's Board of Regents and the Director of the Extension Service sits as an ex-officio member of the SEA Board. There are some cooperative programs--particularly in cases where the regional service is located. But the relationship is not extensive and not highly active. We sensed that the University was not overly enthusiastic about

the SEA's service mission, but found it innocuous enough not to make an issue of it. The traditions and practices in Wisconsin (repeated at the Federal level by Cooperative Extension's ability to gain control of EPA extension funds) suggests that if a large educational extension system were ever to be operated in Wisconsin, those responsible for University Extension would have little trouble making sure it was assigned to the University, not the SEA.

APPENDICES

APPENDIX A

California Cooperative Extension Service Respondents

In California, the following employees of the California Cooperative Extension Service were interviewed:

Mr. Jerry Siebert, Associate Director

Mr. Glenn Voskuil, County Director and Dairy Advisor, Merced County, Merced

Ms. Estella West, Home Economics Agent, Santa Clara County, San Jose

In addition, the following people involved in the dissemination of educational information were interviewed:

Dr. Helen Dell, Director of Curriculum and Staff Development, Department of Education, Archdiocese of San Francisco, and Director of the Teacher's Center, Menlo Park

Ms. Anne Roper, Creative Publications Teachers' Center, Mountain View

Dr. Harley Roth, Director of Curriculum, Office of the Superintendent of Schools, Santa Clara County, San Jose

APPENDIX B

Colorado Cooperative Extension Service Respondents

I. Headquarters

Mr. Lowell Watts, Director, Colorado State University

Dr. Matt Felton, Associate Director, Colorado State University

Dr. Hugh Henderson, Assistant Director, Agriculture Production, Marketing, and Natural Resources, Colorado State University

Mr. Mel Eckard, Personnel, Human Development, Colorado State University

Mr. Jim Echols, Extension Agronomy Coordinator, Colorado State University

II. Urban County: Jefferson

Ms. Linda Saunders, Extension Agent, Community Development, Denver

Mr. Bruce Gitner, Extension Agent, 4-H and Youth, Denver

Dorothy Faulkenberg, Horticulture Aide, Denver

III. Rural County: Fort Morgan

Mr. Chester Fithian, County Agent, Fort Morgan

Ms. Micky Baugh, Extension/Home Economics Agent, Fort Morgan

Mr. Michael Kernan, Extension/4-H Agent, Fort Morgan

IV. Area Program: Washington, Kit Carson, Yuma, and Phillips Counties

Mr. Richard Travis, Area Director, Akron

APPENDIX C

New Mexico Extension Service Respondents

In New Mexico, the following employees of the New Mexico Extension Service were personnally interviewed:

Mr. Javier Vargas, County Agricultural Agent, Doña Ana County, Las Cruces

Mrs. Nancy Riley, Home Economics Agent, Doña Ana County, Las Cruces

Ms. Sue Bodkin, 4-H Agent, Doña Ana County, Las Cruces

Mrs. Priscilla Grijalva, EFNEP Program, Doña Ana County, Las Cruces

Dr. Angel Gomez, Assistant Director, New Mexico Extension Service

Dr. Eugene Ross, Associate Director, New Mexico Extension Service

Mr. James Sais, County Agricultural Agent, Bernallilo County, Albuquerque

Mr. Palemon A. Martinez, County Agricultural Agent, Santa Fe County, Santa Fe

APPENDIX D

New York Cooperative Extension Service Respondents

In New York, the following persons in the Cooperative Extension Service were interviewed:

Dr. David Call, Director

Mr. David W. Dik, Assistant Director and Affirmative Action Officer

Mr. Rodney Lightfoote, County Coordinator and Agricultural Agent, Ontario County, Canandaigua

Mr. Roger Lord, County Coordinator and Community Resource Development Agent, Onondaga County, Syracuse

Dr. Lucinda Noble, Associate Director, Human Ecology Program

Mr. Richard Norton, Regional Fruit Specialist, Lake Ontario Region, Rochester

Dr. W. Shaw Reid, Department Extension Leader, Agronomy Department

Ms. Ethel Samson, Staff Development Officer

Mr. David T. Smith, Associate Director, Agriculture and National Resources Program

APPENDIX E

Wisconsin Cooperative Extension Service Respondents

Dr. Jean Evans, Chancellor/Vice Provost, University of Wisconsin

Dr. Gale Vandeberg, Assistant Chancellor/Director of Cooperative Extension Program, University of Wisconsin